

UNITED STATES OF AMERICA : CRIMINAL ACTION
:
v. :
:
YUJIE DING, et al. : NO. 15-35

April 22, 2016

In February 2015, the grand jury returned an indictment charging defendants Ding and Zotova with ten counts of wire fraud in violation of 18 U.S.C. § 1343. The indictment alleged that the defendants engaged in a scheme to defraud the National Aeronautics and Space Administration ("NASA") with respect to proposals for research contracts. As part of the scheme, the defendants electronically submitted ten invoices in interstate commerce to NASA for payment. At the conclusion of the trial, the jury acquitted both defendants on Counts One through Four and found them guilty on Counts Five through Ten.

The evidence upon which a reasonable juror could rely, taken in the light most favorable to the government, is as

follows. See United States v. Centeno, 793 F.3d 378, 386 (3d Cir. 2015).

Defendant Zotova has a Ph.D. in Nonlinear Optics and Optoelectronics from the University of Arkansas. See Ex. 2 at 23. Her husband, defendant Ding, was a highly-regarded Professor of Electrical Engineering at Lehigh University with more than twenty-five years of experience. See Ex. 2 at 26. Ding was also the sole proprietor of an entity known as Arklight. See Ex. 306 at 3; Tr. Nov. 17, 2015 at 32. He and Zotova used Arklight to obtain research funding from NASA through its Small Business Innovation Research ("SBIR") Program. See Tr. Nov. 17, 2015 at 33. The SBIR program exclusively funds small businesses, which the program defines as for-profit, U.S. businesses with less than 500 employees. See Ex. 1 at 4, 11. The SBIR program aims:

to stimulate technological innovation in the private sector; to strengthen the role of [small business concerns] in meeting Federal research and development needs; to increase the commercial application of these research results; and to encourage participation of socially and economically disadvantaged persons and women-owned small businesses.

See Ex. 1 at 4. The gravamen of the SBIR program is to encourage small businesses to come up with new technologies. See Tr. Nov. 9, 2015 at 50.

Applicants seek funding from NASA's SBIR program in three stages. See Ex. 1 at 6. Phase 1 funding, which is available up to \$100,000, has to be used "to determine the scientific, technical, and commercial merit and feasibility of the proposed innovation, and the quality of the [small business concern]'s performance." See Ex. 1 at 6. Work completed and results obtained during Phase 1 "should provide a sound basis for the continued development, demonstration and delivery of the proposed innovation in Phase 2 and follow-on efforts." See Ex. 1 at 6. Phase 2 funding, which is available up to \$600,000, has to be used for "the development, demonstration, and delivery of the innovation." See Ex. 1 at 6. Finally, Phase 3 is designed to commercialize the products developed in Phases 1 and 2 for sale to government and non-government customers. See Ex. 1 at 7, 17.

In order to obtain funding through the SBIR program, a small business is required to submit proposals certifying that it will comply with the program requirements and explaining its research strategy and goals. These certifications are "all critical elements for eligibility in things that matter to NASA" in awarding the contracts. See Tr. Nov. 9, 2015 at 62.

Significantly, the applicants have to certify in their proposal that they have a Principal Investigator primarily employed by the small business:

[p]rimary employment means that more than half of the [Principal Investigator]'s total employed time (including all concurrent employers, consulting, and self-employed time) is spent with the [small business concern]. Primary employment with a small business concern precludes full-time employment at another organization.

. . .

Co-[Principal Investigators] are not permitted.

See Ex. 1 at 7. The Principal Investigator is "the main individual responsible for the success in carrying out the project." See Tr. Nov. 9, 2015 at 95. Specifically, the Principal Investigator is responsible for "planning, leading, and directing the project" and overseeing "the day-to-day activities of the work." See Tr. Nov. 9, 2015 at 58, 95. The applicants for SBIR funding have to name the Principal Investigator in the proposal, and the Principal Investigator cannot be subsequently replaced without NASA approval. See Tr. Nov. 9, 2015 at 51-52; Ex. 1 at 7, 26-28. The identity of the Principal Investigator identified in the proposal is "a highly rated factor, and it's often a key determinate who that key personnel is in getting the award." See Tr. Nov. 9, 2015 at 53.

The SBIR program permits the small business to subcontract only a portion of the work as long as it remains "the primary company that's creating this technology and

creating the innovation.” See Tr. Nov. 9, 2015 at 60. Phase 1 subcontracting may not account for more than one-third of the contract work and funding, and Phase 2 subcontracting is limited to one-half. See Ex. 1 at 18, 24. These subcontracting limits ensure that the small business retains control over the project and preclude larger institutions from co-opting the project. See Tr. Nov. 9, 2015 at 59-60. The subcontracting “needs to be spelled out in our proposal because [NASA] ha[s] specific requirements for it.” See Tr. Nov. 9, 2015 at 59. NASA “want[s] to make sure that the small business is the primary person doing the work” rather than “what we call the ‘Pass Through’ . . . using it as a front to just move work through.” See Tr. Nov. 9, 2015 at 59-60. Proposals for SBIR funding are not approved if they exceed the subcontracting limits. See Tr. Nov. 9, 2015 at 194, 227. Significantly, any “[m]isrepresentations of [q]ualifications” in the SBIR proposal “[w]ill result in rejection of the proposal or termination of the contract.” See Ex. 1 at 7.

Zotova signed and Ding submitted on behalf of Arklight the Phase 1 proposal in issue, which was dated September 2009. See Ex. 2 at 3; Tr. Nov. 16, 2015 at 230-31. The proposal was titled: “Frequency Up-Conversion Detection System with Single Photon Sensitivity within 1-1.8 μm and 3-4 μm for ASCENDS Mission: A Novel Approach to Lidar.” See Ex. 2 at 1, 4. In

the Phase 1 proposal, Arklight certified that it had two employees: one being Zotova, the Principal Investigator, and the other an optical engineer to be hired. See Ex. 2 at 2, 7. With respect to Zotova, the proposal stated:

Dr. Yuliya B. Zotova will serve as the principal investigator for the entire project. She will be supported for the period of six months. During this period, she will not spend any effort on any other project. She will plan and direct the entire project; lead it technically and make substantial personal contributions during its implementation; serve as the primary contact with NASA on the project; and ensure that the work proceeds according to contract agreements.

See Ex. 2 at 23.

In a section of the proposal entitled "Biographical Sketch of Dr. Yuliya B. Zotova," Arklight stated that Zotova was "President and R&D Director of Arklight." See Ex. 2 at 23. In this regard, the proposal explained:

Dr. Yuliya B. Zotova is the current president of Arklight. She will make all decisions within Arklight. Prof. Ding has agreed to make his three state-of-the-art research labs available for making any measurements and carrying out calculations necessary for successfully carrying out the research project proposed during Phase 1.

See Ex. 2 at 25. In a section entitled "Commitment Note from Prof. Yujie J. Ding," Arklight stated that, along with Ding:

Dr. Zotova will be able to co-supervise the two graduate students to be supported by this proposal. . . . I [Ding] believe that

being a woman, Dr. Zotova will have an advantage of working as a role model for these graduate students.

See Ex. 2 at 28.

The proposal included a subcontracting budget for Lehigh University, which would receive one-third of the \$100,000 Phase 1 funding. See Ex. 2 at 9. Dr. Ding was identified as Lehigh University's Principal Investigator for the subcontract, in contrast to Zotova who was Arklight's Principal Investigator.

See Ex. 2 at 26. The proposal explained:

Dr. Zotova will be in charge of the entire SBIR Phase-1 research project. A subcontract would be awarded to Lehigh University with Prof. Yujie J. Ding serving as the PI of the subcontract for an amount of \$33,333.00. This amount will be used to support two graduate students Dr. Zotova will closely work with these two graduate students. In particular, she will design all the experiments and supervise all the experimental activities of these two graduate students on a daily basis. Moreover, she will work with the graduate students to carry out all the calculations and simulations necessary to support the experimental results and to predict the performance of the system through optimizations.

. . .

Dr. Zotova will serve as a role model for these students.

See Ex. 2 at 26.

Based upon these representations, NASA awarded Arklight \$100,000 from the SBIR program for Phase 1 to run from

January 2010 to July 2010. See Tr. Nov. 17, 2015 at 35; Ex. 7. A contract between NASA and Arklight was executed but not before NASA had "review[ed] the forms and the certifications to make sure it meets the requirements for the program." See Tr. Nov. 9, 2015 at 191-93. If the proposal violated the subcontracting limitation or the Principal Investigator requirements, NASA would not have awarded the contract. See Ex. 1 at 7; Tr. Nov. 9, 2015 at 194-95.

Arklight submitted a Phase 2 proposal dated July 2010. See Ex. 22 at 3. This proposal was for a continuation of the Phase 1 project. The defendants certified in the Phase 2 proposal on behalf of Arklight that Zotova would be the Principal Investigator primarily employed with Arklight for the twenty-four month Phase 2 contract. See Ex. 22 at 2, 4. The Phase 2 proposal stated that "[s]he has served as the principal investigator for the Phase 1 effort." See Ex. 22 at 36. It explained that "Dr. Zotova will be in charge of the entire SBIR Phase 2 research project." See Ex. 22 at 42. The proposal provided that:

Dr. Yuliya B. Zotova will serve as the principal investigator for the entire Phase 2 project. She will plan and direct the entire project; lead it technically and make major personal contributions during its implementation; serve as the primary contact with NASA on the project; and ensure that the work proceeds according to contract agreements.

See Ex. 22 at 35-36. The proposal emphasized that as "the current president of Arklight," Zotova would "make all decisions within Arklight" and "be in charge of the entire SBIR Phase 2 research project." See Ex. 22 at 41-42.

The proposal further stated:

Dr. Zotova will closely work with the graduate student and postdoctoral fellow under the support. In particular, she will design all the experiments, supervise, and conduct all the experimental activities on a daily basis. Moreover, PI will work with the graduate student and postdoctoral fellow to carry out all the calculations and simulations necessary to support the experimental results and to predict the performances of the detectors, spectrometers, and 3-D imaging systems through optimizations. Prof. Ding will work on the effort for about eight hours per week. Due to the limited budget, his effort will be free of charge.

. . .

PI and Prof. Ding will actively recruit minority and female graduate students and postdoctoral fellows to conduct the proposed research. Dr. Zotova will serve as a role model for the student and postdoctoral fellow.

See Ex. 22 at 42.

The Phase 2 proposal included a "Commitment Note from Prof. Yujie J. Ding" which provided:

[d]uring the Phase-2 research period, Dr. Zotova will be able to supervise the graduate student and postdoctoral fellow to be supported by this proposal. We will make

every effort to recruit minority and female personnel to fill these positions. I believe that being a woman, Dr. Zotova will have an advantage of working as a role model for them. They will be exposed to the first-hand experience on industrial research and technology transfer.

See Ex. 22 at 45. Arklight again stated that it would employ two individuals to work on the project: Zotova as the Principal Investigator and an optical engineer. See Ex. 22 at 35, 40. Arklight further explained that it would subcontract with Lehigh University and that a post-doctoral fellow and a graduate student would "carry out the proposed research under the joint supervisions of Prof. Yujie J. Ding and Dr. Yuliya B. Zotova." See Ex. 22 at 8; Ex. 25 at 3. Again, Ding was identified as a Lehigh University Professor. See Ex. 22 at 42. There was no reference to Ding as being affiliated with Arklight.

In May 2011, some ten months after the date of Arklight's Phase 2 proposal, NASA contracted with Arklight to supply \$600,000 in SBIR funding to complete the Phase 2 project between June 2011 and June 2013. See Ex. 26 at 2. Latessa Poole, the NASA Contracting Officer responsible for reviewing, negotiating, and awarding the Phase 2 contract, testified that she would not have approved the contract without ensuring that the Principal Investigator and subcontracting requirements were met. See Tr. Nov. 9, 2015 at 194.

Evidence presented at trial demonstrated that the representations in the proposals were very different from the reality. The proposal for Phase 1 stated that Zotova would "closely work with" two graduate students and supervise their activities "on a daily basis." See Ex. 2 at 26. In the proposal for Phase 2, the defendants stated that Zotova would "closely work with the graduate student and postdoctoral fellow" and would "serve as a role model for the student and postdoctoral fellow." See Ex. 22 at 42.

Yi Jiang ("Jiang"), the postdoctoral fellow who worked on the Phase 1 contract, testified that he never met or had any other contact with Zotova. See Tr. Nov. 12, 2015 at 130, 133-34. He worked on the Phase 1 contract alongside only Ding and Da Li ("Li"), an undergraduate student. See Tr. Nov. 12, 2015 at 133-34. He and Li designed the experiment, conducted the experiment, and collected the data. See Tr. Nov. 12, 2015 at 171-77. Jiang completed almost all work described in the Phase 1 interim progress reports to NASA. See Tr. Nov. 12, 2015 at 190-92. Ding, Jiang, and Li were the only individuals to work on the Phase 1 project. See Tr. Nov. 12, 2015 at 133-34.

Li worked on the NASA project during Phases 1 and 2. His testimony demonstrated that Zotova had extremely limited or no involvement. The NASA project, according to Li, was based on Ding's idea. See Tr. Nov. 13, 2015 at 61. Li's role on the

project included purchasing components, setting-up and performing the hands-on experiment, measuring outputs, and collecting data. See Tr. Nov. 13, 2015 at 61-62. He also worked with Ding and Jiang in Phase 1 to analyze and produce written summaries of the project results. See Tr. Nov. 13, 2015 at 62. He and Ding analyzed and summarized project results face-to-face in Ding's office for considerable periods of time, as well as by phone and email. See Tr. Nov. 13, 2015 at 71-72, 137. Li drafted and Ding revised the quarterly report to NASA dated June 30, 2011. See Tr. Nov. 13, 2015 at 73-84, 144-47; Ex. 36. A cover sheet was later added to the reports creating the appearance that the report had been drafted by Zotova. See Tr. Nov. 13, 2015 at 73-84, 144-47; Ex. 36 at 1. Li identified Ding, Jiang, and himself as being participants in these activities and never identified Zotova in this regard. According to Li, Zotova merely contributed in two ways to the NASA project: the optimization process for the oven and a conversation with Li "about how to improve the conversion on the coupling efficiency from fiber to the waveguide."¹ See Tr. Nov. 13, 2015 at 79-80, 157.

1. The government presented evidence that this portion of Li's trial testimony was inconsistent with his grand jury testimony. See Tr. Nov. 13, 2015 at 141-43. Before the grand jury, Li had stated under oath that Zotova was introduced to him as a visiting scholar on the single occasion on which she was present in the laboratory. See Tr. Nov. 13, 2015 at 141-43. Li also

Zotova, who took the stand, conceded that she did not go to the research laboratories at Lehigh University at any point during Phase 1. See Tr. Nov. 17, 2015 at 35. She explained that "a certain psychological issue" from which she has "suffer[ed] from childhood" made it difficult for her to socialize with people and prevented her from meeting anyone working on the NASA project. See Tr. Nov. 16, 2015 at 200-01, 215. She admitted that she could not supervise the male researchers that actually worked on the NASA project because of a language barrier and her psychological issues. See Tr. Nov. 16, 2015 at 213-14. She believed that she would be able to communicate with a female student. See Tr. Nov. 16, 2015 at 213-14. According to Zotova, she and Ding had tried but were unable to find a female graduate student for the NASA project. See Tr. Nov. 16, 2015 at 213-14. Instead, she arranged to have Ding bring home the results from the laboratory so she could conduct theoretical work from home. See Tr. Nov. 16, 2015 at 215. Although she claimed to have communicated with Jiang by relaying messages to Ding, Zotova admitted that she never communicated directly with or met Jiang. See Tr. Nov. 17, 2015 at 36. Zotova testified that she did not visit the laboratory at Lehigh University until the summer of 2012, approximately one

testified to the grand jury that Jiang, Ding, and himself were the only people to work on the NASA project. See Tr. Nov. 13, 2015 at 146-49.

year into the Phase 2 contract. See Tr. Nov. 16, 2015 at 243-47.

The proposal required Zotova as Principal Investigator to be primarily employed by Arklight and prohibited her from having a full-time job elsewhere. See Ex. 1 at 7. Nonetheless, Zotova obtained full-time employment as a Development Engineer at a technology firm called Cyoptics in September 2012, in the midst of the Phase 2 project, which was scheduled to continue until June 2013. See Tr. Nov. 16, 2015 at 249; Ex. 116; Ex. 117; Ex. 118. The jury also heard evidence that while a search warrant was being executed at the defendants' home on June 5, 2013, Zotova told investigators that she had not had anything to do with ArkLight for over a year and that she had not spoken to Ding since September 2012. See Tr. Nov. 16, 2015 at 19, 142-43, 149-50.

Pursuant to the Phase 1 and 2 contracts, Arklight submitted ten invoices to NASA to collect SBIR funding for work completed. Although Zotova provided her name and contact information on the invoices, it was Ding who actually submitted those invoices to NASA.² See Tr. Nov. 16, 2015 at 230-31. The

2. Some of those invoices were accompanied by certifications that, among other things, "[t]he subcontracting limitation set forth in the contract was not exceeded" and "[t]he primary employment of the principal investigator (PI) identified in this contract was with the Contractor." See Ex. 17; Ex. 44; Ex. 46; Ex. 48; Ex. 50; Ex. 52; Ex. 54; Ex. 56. The defendants have not

invoices were sent by computer from Pennsylvania to the NASA servers in Virginia. NASA then paid the invoices into Arklight's bank account, and Ding and Zotova transferred a portion of those funds from the Arklight account to their personal bank accounts. See Tr. Nov. 16, 2015 at 154-67.

The indictment, as noted above, charged the defendants with ten counts of wire fraud, one for each invoice submitted to NASA by the defendants for payment to Arklight for the Phase 1 and 2 contracts. The jury acquitted Zotova and Ding on Counts One through Four. These Counts involved the defendants' submission of the following invoices for: \$30,000 on February 17, 2010 as charged in Count One; \$30,000 on May 12, 2010 as charged in Count Two; \$40,000 on August 26, 2010 as charged in Count Three; and \$30,000 on July 15, 2011 as charged in Count Four. The first three sought payment for Phase 1 work and the fourth was the first invoice for payment for Phase 2.

The jury convicted each defendant on Counts Five through Ten, which concerned the following invoices submitted by the defendants to NASA for: \$70,000 on October 1, 2011 as charged in Count Five; \$70,000 on June 30, 2012 as charged in Count Six; \$70,000 on September 29, 2012 as charged in Count Seven; \$70,000 on December 28, 2012 as charged in Count Eight;

been charged with making false statements. See 18 U.S.C. § 1001.

\$40,000 on February 28, 2013 as charged in Count Nine; and \$110,000 on June 3, 2013 as charged in Count Ten.

II.

The defendants were charged with wire fraud based on misrepresentations that they made in submitting to NASA the Phase 1 and 2 proposals for SBIR funding. A person is guilty of wire fraud where that person:

having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice.

See 18 U.S.C. § 1343. To convict a defendant of wire fraud, the jury must find that the defendant knowingly devised a scheme to defraud by materially false or fraudulent representations, acted with intent to defraud, and transmitted a writing by wire communication in interstate commerce in furtherance of the scheme to defraud. See id. “[T]he use of the [wires] need not be an essential element of the scheme,’ but rather, ‘[i]t is sufficient for [the use of the wires] to be incident to an essential part of the scheme, or a step in the plot.’” United States v. Keller, 395 F. App’x 912, 915 (3d Cir. 2010) (quoting Schmuck v. United States, 489 U.S. 705, 710-11 (1989)).

A misrepresentation is material where it has "a natural tendency to influence, or [is] capable of influencing, the decision of the decisionmaking body to which it was addressed." See Neder v. United States, 527 U.S 1, 16 (1999); United States v. Moleski, 2016 WL 231537, at *2 (3d Cir. Jan. 20, 2016); United States v. McBane, 433 F.3d 344, 350 (3d Cir. 2005). Materiality "concerns whether a reasonable person would consider a fact important." See United States v. Newmark, 374 F. App'x 279, 283 (2010).

Ding and Zotova have first moved for an acquittal on Counts Five through Ten under Rule 29 of the Federal Rules of Criminal Procedure. Rule 29 provides: "[i]f the jury has returned a guilty verdict, the court may set aside the verdict and enter an acquittal." See Fed. R. Crim. P. 29(c). In evaluating the defendants' Rule 29 motion, we consider "whether, after viewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt." See United States v. Centeno, 793 F.3d 378, 386 (3d Cir. 2015) (quoting United States v. Caraballo-Rodriguez, 726 F.3d 418, 424-25 (3d Cir. 2013)); United States v. Stevens, 935 F.2d 1380, 1406 n.28 (3d Cir. 1991).

The indictment charged that Ding and Zotova presented Arklight as a legitimate small business that would lead the

research and development efforts described in the Phase 1 and 2 proposals. Ding and Zotova thus made Arklight appear eligible for SBIR funding, which is only available for small businesses. Yet, the jury could reasonably find that Arklight was actually a shell entity and that the defendants intended that Ding, his postdoctoral fellow, and his graduate student would perform all of the proposed work in the Lehigh University laboratories using only a portion of the SBIR funding. Ding and Zotova then kept the remainder of the funding for themselves.

Defendant Ding claims that the jury could not have found the defendants guilty on Counts Five through Ten after acquitting them of the first four Counts.³ He argues that he is entitled to a judgment of acquittal based on both the meaning of the acquitted counts and the alleged failure of proof at trial. He notes that the jury acquitted the defendants on Counts One through Four, which correspond to invoices submitted between February 2010 and July 2011. Again, the first three invoices concerned Phase 1 and the fourth invoice concerned Phase 2. He maintains that these acquittals must be interpreted as proof that the defendants acted in compliance with the law when

3. At oral argument on the pending motions, counsel for Zotova stated that Zotova did not join this argument concerning the meaning of the acquittals. Counsel did, however, argue that regardless of the acquittals, the evidence before the jury was insufficient to support the convictions. We deal with the sufficiency of the evidence below.

submitting the Phase 1 proposal in September 2009 and the Phase 2 proposal in July 2010. In this regard, he asserts that the acquittals negate the government's theory of affirmative fraud in submission of the proposals. Furthermore, he claims that the convictions on the six subsequent counts were improper because they concerned mere breaches of the Phase 1 and 2 contracts rather than criminal wire fraud.

The theory of Ding requires us to delve into the mindset of the jurors, which we cannot do. As the U.S. Supreme Court held in Dunn v. United States, 284 U.S. 390 (1932), and reaffirmed in United States v. Powell, 469 U.S. 57 (1984), "a criminal defendant convicted by a jury on one count could not attack that conviction because it was inconsistent with the jury's verdict of acquittal on another count." See Powell, 469 U.S. at 58. In Dunn, the jury convicted on only one count even though "[t]he evidence was the same for all the counts." See Dunn, 284 U.S. at 392. The Supreme Court explained that "[c]onsistency in the verdict is not necessary. Each count in an indictment is regarded as if it was a separate indictment." See id. at 393.

Where the jury convicts on one count and acquits on another, "[t]he most that can be said in such cases is that the verdict shows that either in the acquittal or the conviction the jury did not speak their real conclusions, but that does not

show that they were not convinced of the defendant's guilt." See Powell, 469 U.S. at 63 (quoting Dunn, 284 U.S. at 393). The Powell Court explained, "[t]he fact that the inconsistency may be the result of lenity, coupled with the Government's inability to invoke review, suggests that inconsistent verdicts should not be reviewable." Id. at 66. In short, jury lenity is not a reason to overturn an inconsistent jury verdict. See United States v. Maury, 695 F.3d 227, 264 (3d Cir. 2012). Thus, we reject Ding's invitation to infer that the acquittals on Counts One through Four mean that the scheme to defraud NASA was "unproven."

Ding argues that his case is distinguishable from the Dunn/Powell lines of cases because he was charged with several counts relating to a single scheme, the jury verdict was inconsistent, and there was insufficient evidence in support of the convictions. We disagree. We will not conflate arguments concerning verdict inconsistency with the sufficiency of the evidence supporting the convictions. See Powell, 469 U.S. at 67; United States v. Salahuddin, 765 F.3d 329, 349 (3d Cir. 2014). For this reason, our Court of Appeals rejected an "argument that necessarily assume[d]" the meaning of the acquittals, explaining that "all we know is that the verdicts are inconsistent." See Powell, 469 U.S. at 68. As we explain herein, the evidence is not insufficient, and we will not take

the acquittals to mean that the jury rejected all evidence offered by the government in support of the acquitted counts. Ding has offered no persuasive reason for making an exception to the Dunn/Powell rule.

We now turn to the sufficiency of the evidence presented at trial. Although convictions are not reviewable because of an inconsistent verdict, the Supreme Court in Powell explained that defendants are protected by the "independent review of the sufficiency of the evidence undertaken by the trial and appellate courts." See Powell, 469 U.S. at 67. In this regard, we "independently re-examine the record and determine as a matter of law whether the evidence could support an inference of guilt beyond a reasonable doubt." See Stevens, 935 F.2d at 1406 n.28 (quoting United States v. Ashfield, 735 F.2d 101, 106 (3d Cir. 1984)); Powell, 469 U.S. at 67. "The burden on a defendant who raises a challenge to the sufficiency of the evidence is extremely high." Salahuddin, 765 F.3d at 348 (quoting United States v. Starnes, 583 F.3d 196, 206 (3d Cir. 2009)).

Having presided at the trial and reviewed the trial record, we find that there is ample evidence for a reasonable jury to conclude that the government proved beyond a reasonable doubt that Ding and Zotova violated the federal wire fraud statute, 18 U.S.C. § 1343. There is no dispute that the

defendants wired in interstate commerce the invoices to NASA which were the subject of Counts Five through Ten. The government presented evidence that Ding and Zotova misrepresented Arklight's involvement when they submitted the Phase 1 and 2 research proposals to NASA in September 2009 and July 2010, respectively. In our view, a rational trier of fact could easily find, based on the evidence at trial, that the defendants made misrepresentations and acted with intent to defraud in stating that Zotova would be the Principal Investigator, that Arklight would take the primary role on the project, and that Lehigh University would perform no more than one-third of the work in Phase 1 and one-half of the work in Phase 2. Contrary to the defendants' representations in the proposals, the evidence at trial demonstrated that Zotova was minimally involved in the project, if at all, and that instead Ding, Jiang, and Li completed the entire project at Lehigh University using only a portion of the SBIR funding.⁴ Thus, the jury could reasonably find that Arklight was just the "Pass Through" used by the defendants as a front to obtain NASA

4. Contrary to what the proposals stated, Arklight never hired an optical engineer. See Tr. Nov. 17, 2015 at 8-9.

funding to advance Ding's research at Lehigh University.⁵ See Tr. Nov. 9, 2015 at 59-60.

There was testimony that Zotova never met or spoke with the graduate student and postdoctoral fellow working on the NASA project, did not go to the laboratory where portions of the project were conducted, and was not mentioned to or known to the postdoctoral researcher or graduate student during their work on the project. Jiang and Li worked one-on-one with Ding at Lehigh University on major components of the project without ever being informed that Zotova was also involved in the project. The subcontract that Lehigh University entered into with Arklight obligated it to complete all technical objectives for the entire Phase 1 and 2 contracts. Compare Ex. 100 at 41 with Ex. 22 at 16-17.

These misrepresentations, the jury could easily find, were material. The jury heard testimony that NASA would not have awarded SBIR funding to Arklight had it known that Ding and Zotova intended to pocket some of those funds while paying subcontractor Lehigh University a portion of the funding to do all of the contract work. Thus, as in Moleski, "[t]he government presented substantial evidence from which a reasonable jury could (and apparently did) conclude that [the

5. There was evidence that, as stated in the proposal, Ding worked on the NASA project only in his role as a Professor at Lehigh University. See Ex. 2 at 26; Ex. 22 at 42.

defendants'] misrepresentations had the tendency or ability to influence decisionmakers at the target organizations." Moleski, 2016 WL 231537, at *2. Our Court of Appeals has stated that the materiality "standard require[s] only that the false statement at issue be of a type capable of influencing a reasonable decisionmaker," although "a false statement that actually affects or is capable of affecting a specific decision by an agency makes for an easier materiality determination." See McBane, 433 F.3d at 351.

Here, the defendants' misrepresentations in the proposal actually influenced NASA to award funding to Arklight. Carlos Torrez ("Torrez"), NASA's program manager for the SBIR programs, testified that only small businesses are eligible to receive funding from NASA's SBIR program and that the small business must be the primary actor on the project. See Tr. Nov. 9, 2015 at 50, 59-60. Torrez stated that a university cannot qualify as a small business under the SBIR program but that it can participate as a subcontractor. See Tr. Nov. 9, 2015 at 39-40. Likewise, Latessa Poole, the NASA contracting officer responsible for reviewing, negotiating, and awarding the Arklight contract, testified that she relied on the small business's honesty when evaluating its proposed budget and would not approve a contract that violated the subcontracting limitation. See Tr. Nov. 9, 2015 at 194-95, 202.

The SBIR Program Solicitation clearly stated that any "[m]isrepresentations of [q]ualifications" in the SBIR proposal "[w]ill result in rejection of the proposal or termination of the contract." See Ex. 1 at 7. There was also testimony that NASA would not have awarded funding to Arklight if it knew that, contrary to the certifications in the proposals, Zotova would not actually serve as the Principal Investigator for Phases 1 and 2. Torrez stated:

that the principal investigator must be primarily employed by the small business concern. They need to certify to that primarily - primary employment at the time of the award.

. . .

We don't allow co-principal investigators because we want a single person responsible for carrying out the research and one point of contact.

. . .

[D]ue to the critical needs of the PI, it's a very important function for the PI that - that we evaluate it. It's a highly rated factor, and it's often a key determinate who that key personnel is in getting the award.

See Tr. Nov. 9, 2015 at 51-53.

Notably, counsel for each defendant has admitted that there was evidence that the representations made by the defendants in the proposals were material to NASA's decision to award SBIR funding to Arklight. In a brief submitted in support

of the pending motion, counsel for Zotova conceded that "[i]n sum, the government's evidence could be legally sufficient to convict." Likewise, counsel for Ding acknowledged that "Carlos Torres [sic], Ken Albright and Latessa Poole testified that NASA relies on the representations in the proposals" in determining whether to award SBIR funding.

The conspicuous absence of Zotova, the purported Principal Investigator, during the NASA project demonstrated not only that the defendants made material misrepresentations in the proposals, but that they also acted with intent to defraud. Zotova admitted at trial that she did not meet, communicate with, or make her presence on the project known to Li or Jiang from January to July 2010, the entire six-month duration of the Phase 1 project. See Tr. Nov. 16, 2015 at 213-15, 243-47; Tr. Nov. 17, 2015 at 35. Ding and Zotova nonetheless submitted the Phase 2 proposal to NASA in July 2010. In the Phase 2 proposal, they claimed that Zotova had "served as the principal investigator for the Phase 1 effort" and, in Phase 2, would "closely work with the graduate student and postdoctoral fellow" and "supervise, and conduct all the experimental activities on a daily basis." See Ex. 22 at 36, 42. All six of the defendants' convictions were for invoices related to the Phase 2 work.

Moreover, there was evidence before the jury that, as stated in the proposals, Ding's involvement in the NASA project

was limited to his role as the Principal Investigator for Lehigh University. Thus, the defendants' argument that Ding worked for Arklight to perform Arklight's Phase 1 and 2 contract obligations fails. In both the Phase 1 and 2 proposals, Ding and Zotova stated that Ding would oversee the Lehigh University subcontract work. See Ex. 2 at 26; Ex. 22 at 42. Those proposals also provided that Arklight's share of the funding would be used to pay two individuals: Zotova and an optical engineer. See Ex. 2 at 7; Ex. 22 at 40. The proposal did not mention that, in addition to his subcontracting work, Ding would also work on the primary contract on behalf of Arklight.

The government also presented evidence that, in furtherance of their intent to defraud NASA, Ding hid his relationship with Arklight from Lehigh University to prevent discovery of a conflict of interest. See Tr. Nov. 12, 2015 at 111-19; Ex. 83 at 1. As the sole proprietor of Arklight, Ding had a conflict of interest in representing Lehigh University on its subcontracts with Arklight. See Tr. Nov. 10, 2015 at 262-64. When Donald M. Bolle, acting head of the electrical engineering department at Lehigh University, asked Ding to describe his relationship to Arklight, Ding stated:

I helped to start this company in Arkansas.
I am no longer a president of this company.
I am just a consultant.

See Ex. 83 at 1. But, there was evidence before the jury that Ding was and always had been the sole proprietor of Arklight. See Ex. 306 at 3; Tr. Nov. 17, 2015 at 32. Around that same time and contrary to his representations to Lehigh University, Ding signed purchase orders as "President of Arklight." See Ex. 304 at 1; Ex. 305 at 3.

There was also evidence that Ding hid his marriage to Zotova from Lehigh University. During internal audits, he did not inform the University that he owned and his spouse worked for Arklight, a company that does business with the University. See Tr. Nov. 10, 2015 at 183-85; Ex. 90 at 1; Ex. 91 at 2-3; Ex. 92 at 2-3; Ex. 93 at 1; Ex. 94 at 1. On a separate occasion, he told the University that his wife was unemployed during the time period in which she was purportedly serving as President of Arklight. See Tr. Nov. 10, 2015 at 139-53; Ex. 104 at 1; Ex. 105 at 1; Ex. 106 at 1; Ex. 107 at 1; Ex. 108 at 1; Ex. 109 at 1; Ex. 110 at 1; Ex. 111 at 1.

In sum, the government presented more than sufficient evidence that the defendants knowingly devised a scheme to defraud NASA using materially false or fraudulent pretenses, that they acted with intent to defraud NASA, and that they used a wire communication in carrying out that scheme, that is the invoices wired on October 1, 2011, June 30, 2012, September 29, 2012, December 28, 2012, February 28, 2013, and June 3, 2013,

which are the subject of the guilty verdicts on Counts Five through Ten of the indictment.⁶ The defendants cannot prove insufficiency of the evidence by pointing to evidence that may weigh in their favor. The inquiry is not whether evidence was presented in support of their view of the case but rather whether there was sufficient evidence before the jury supporting the government's case. We reiterate that there was ample evidence to support the guilty verdicts.

III.

The defendants seek a new trial on Counts Five through Ten under Rule 33 of the Federal Rules of Criminal Procedure, claiming that their convictions on those Counts are against the weight of the evidence.

Rule 33 provides that "the court may vacate any judgment and grant a new trial if the interest of justice so requires." See Fed. R. Crim. P. 33(a). "A district court can order a new trial on the ground that the jury's verdict is contrary to the weight of evidence only if it 'believes that

6. The defendants characterize their conduct as amounting to contractual violations rather than criminal fraud. We disagree. The defendants made affirmative false representations in their proposals prior to even obtaining a contract from NASA. In fact, without those misrepresentations, the Phase 1 and 2 contracts would never have come into existence. The misrepresentations were thus "separate and distinct from the contract" and the proper subject of a criminal prosecution under 18 U.S.C. § 1343. See United States v. Steffen, 687 F.3d 1104, 1116 (8th Cir. 2012).

there is a serious danger that a miscarriage of justice has occurred – that is, that an innocent person has been convicted.’” Salahuddin, 765 F.3d at 346 (quoting United States v. Johnson, 302 F.3d 139, 150 (3d Cir. 2002)). “[M]otions for a new trial based on the weight of the evidence are not favored. Such motions are to be granted sparingly and only in exceptional cases.” United States v. Brennan, 326 F.3d 176, 189 (3d Cir. 2003) (quoting Gov’t of Virgin Islands v. Derricks, 810 F.2d 50, 55 (3d Cir. 1987)). In deciding a motion under Rule 33, the district court “does not view the evidence favorably to the Government, but instead exercises its own judgment in assessing the Government’s case.” Salahuddin, 765 F.3d at 346 (quoting Johnson, 302 F.3d at 150).

In our view, there was more than sufficient evidence presented at trial that Ding and Zotova committed the wire fraud alleged in the indictment. The defendants have simply not shown that the convictions have caused a miscarriage of justice. The defendants argue that because the technical requirements of the Phase 1 and 2 contracts were fulfilled, the convictions should not stand. But whether or not the project was completed and the government received its money’s worth is beside the point. SBIR funding was not available for professors to fund their research, while keeping some portion for themselves. The funding was

meant to encourage the development of small businesses. The purpose and goals of the SBIR were thwarted here.⁷

IV.

Finally, we will deny the defendants' motions under Rule 34 of the Federal Rules of Criminal Procedure. Rule 34 provides that "the court must arrest judgment if the court does not have jurisdiction of the charged offense." See Fed. R. Crim. P. 34(a). As explained above, the indictment sufficiently alleged violations of 18 U.S.C. § 1343, and the government offered a plethora of evidence of those violations at trial. The defendants cannot ignore the evidence presented at trial tending to prove that they misrepresented Arklight's and Zotova's roles in the NASA project at the time they submitted the proposals. For reasons already discussed at length above, we will not interpret the jury's decision to acquit on Counts One through Four as tantamount to an outright rejection of all evidence relating to those counts.

7. The defendants also argue that a miscarriage of justice has occurred because the case involved complex evidence which presented a danger of confusion. This case concerned fraud, not technical compliance with the scientific objectives of the NASA contract.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA	:	CRIMINAL ACTION
	:	
v.	:	
	:	
YUJIE DING, et al.	:	NO. 15-35

ORDER

AND NOW, this 22nd day of April, 2016, for the reasons set forth in the accompanying memorandum, it is hereby ORDERED that:

(1) the motion of defendant Yujie Ding for judgment of acquittal, new trial, and/or arrest of judgment (Doc. # 103) is DENIED; and

(2) the motion of defendant Yuliya Zotova for judgment of acquittal, new trial, and/or arrest of judgment (Doc. # 104) is DENIED.

BY THE COURT:

/s/ Harvey Bartle III

J.